

TowerFeed™ for HP LaserJet 4200 / 4300

Manual



Rutishauser

Manual

TowerFeed™ 444 for Hewlett-Packard LaserJet 4200 / 4300 Printers

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Congratulations! You selected TowerFeed, a superior sheet feeder specifically designed by Rutishauser Data AG in collaboration with Hewlett-Packard, USA, to extend the paper handling capabilities of the HP LaserJet 4200 / 4300.

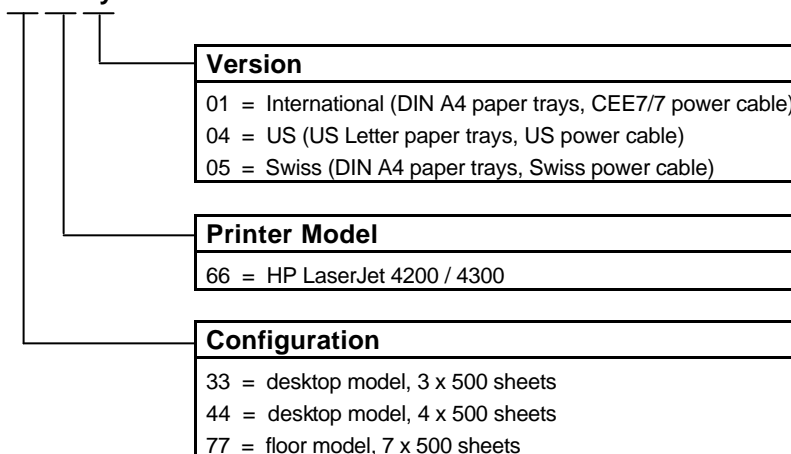
The TowerFeed Option offers new possibilities. You can

- **select from up to 11 different paper types directly from your PC.**
- **print extra copies instead of going to the copier to make copies.** You get the better copies and you Color code copies of documents on color paper help to clearly identify a copy. The color already defines the addressee and you will save the marking of the copies.
- **realize an attractive alternative to the multi-part forms printed on conventional impact printers.** You will get better copies, raise the flexibility and you can save cost for expensive preprints and chemical papers.

We encourage you to read this manual carefully to ensure correct installation and reliable operation. While installing TowerFeed, or whenever an unclear situation arises, please also consult the user's manuals of your HP LaserJet 4200 / 4300, your computer system, your application software and your network software.

The name TowerFeed is generic to the TowerFeed family of automatic sheet feeders and is used throughout this manual. TowerFeed has this model number scheme:

TowerFeed 444/xx.66.0y



For example: TF 444/77.66.01 is an international version with 7 DIN A4 paper trays, and CEE7/7 power cable.

A plate showing type, designation and serial number is located besides of the power inlet of TowerFeed. Please refer to this designation and the serial number whenever you call your service organization.

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Windows™ is a registered trademark of Microsoft Corp.

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UNPACKING

Note:

Prior to delivery, your TowerFeed was thoroughly tested and carefully packaged.
Please check your unit for transportation damage and/or missing parts immediately upon receipt.

It is advisable to get a second person to help you unpack the unit.

Warning:

TowerFeed may weigh up to 38 kilograms (84 pounds) depending on configuration.
To prevent back strain or injury, bend your knees when lifting the unit, and get help if you need.

To unpack the TowerFeed unit, proceed as follows:

- Cut the packing strips and remove the top of the shipping container (Fig. 1).
- Remove the four blue shock absorbers from the unit corners.
- Desktop unit: Carefully lift the TowerFeed from the lower container.
Floor model: Lay the unit on its side and carefully pull off the lower part of the shipping container (Fig. 2).
- Remove the accessories box. It contains the rollers, the power and data cable, one diskette and this User's Manual.
- Desktop unit: Remove the roller shafts; use a Phillips screwdriver to do so.
- Floor model: Insert the rollers from the accessories box with some force onto the shafts on the TowerFeed bottom plate until they snap into position with an audible click (Fig. 3).
- Stand up the TowerFeed unit (Fig. 4).
- Remove the plastic from TowerFeed.

Re-packing

It is recommended that you keep the packaging material and inserts for proper protection of the unit and its parts in case of reshipment.

To repack TowerFeed, follow the above steps in reverse. Be sure that all accessories including manuals and diskettes are packed in the box. Remove the trays and insert the transportation inserts as shown in Fig. 8, page 7 (It is important to secure the trays to avoid possible shipping damage). Place items according to Fig. 5. Ensure TowerFeed is correctly seated and cushioned. Insert the four blue shock absorbers and close the container.

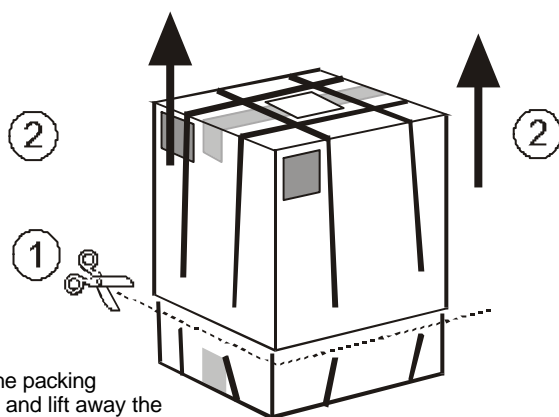


Fig. 1 Cut the packing strips and lift away the top of the shipping container.

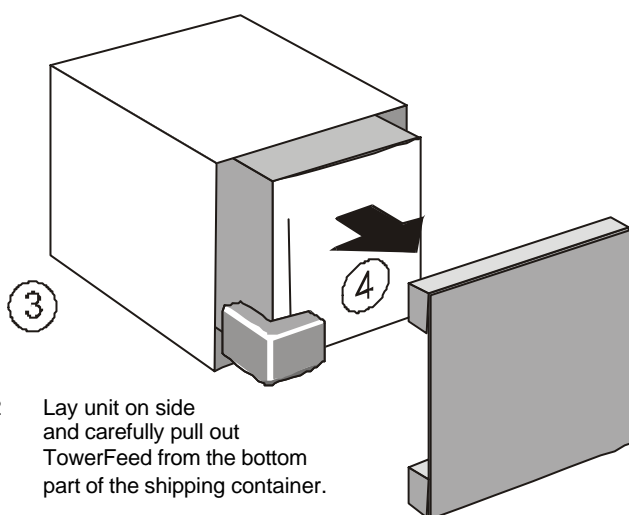


Fig. 2 Lay unit on side and carefully pull out TowerFeed from the bottom part of the shipping container.

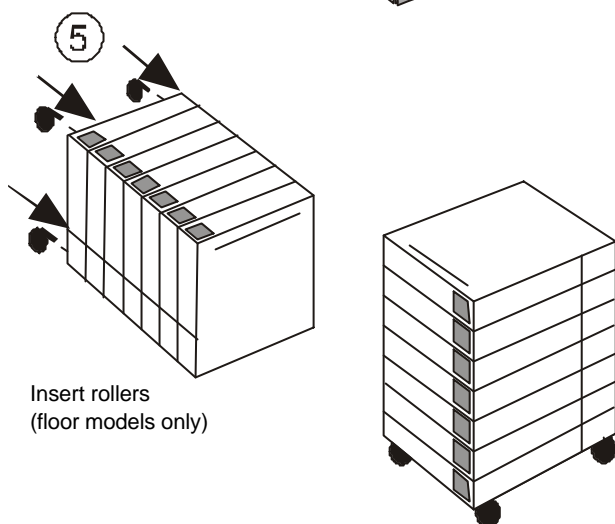


Fig. 3 Insert rollers (floor models only)

Fig. 4 Stand up TowerFeed and remove wrapping

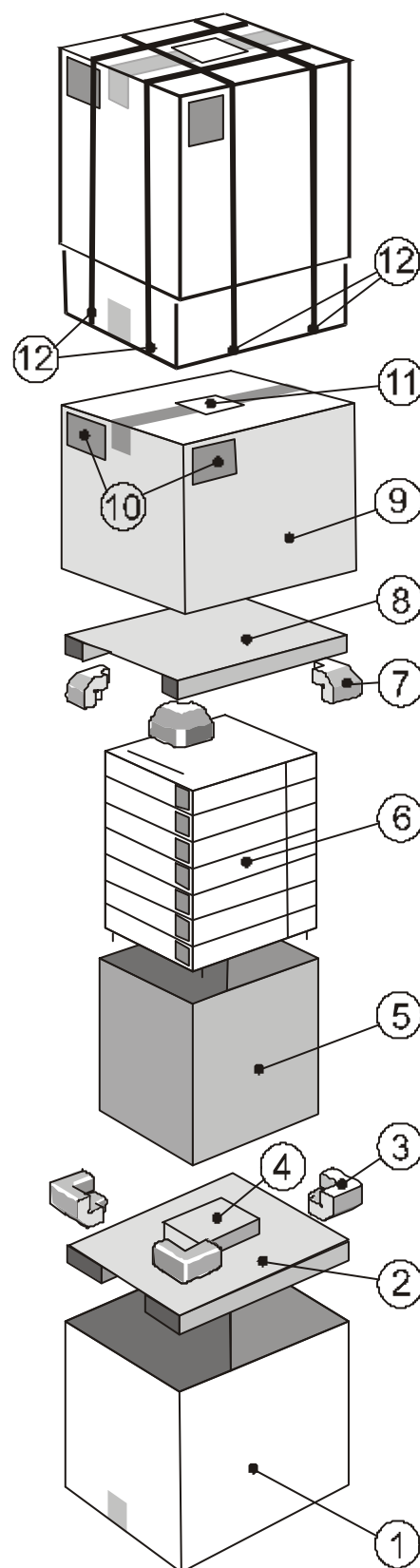


Fig. 5 Re-packing

BOX CONTENTS

Note:

Prior to delivery, your TowerFeed was thoroughly tested and carefully packaged.
Please check your unit for transportation damage and/or missing parts immediately upon receipt.

Box Contents

- (1) TowerFeed unit with drawers
- (2) Accessories box

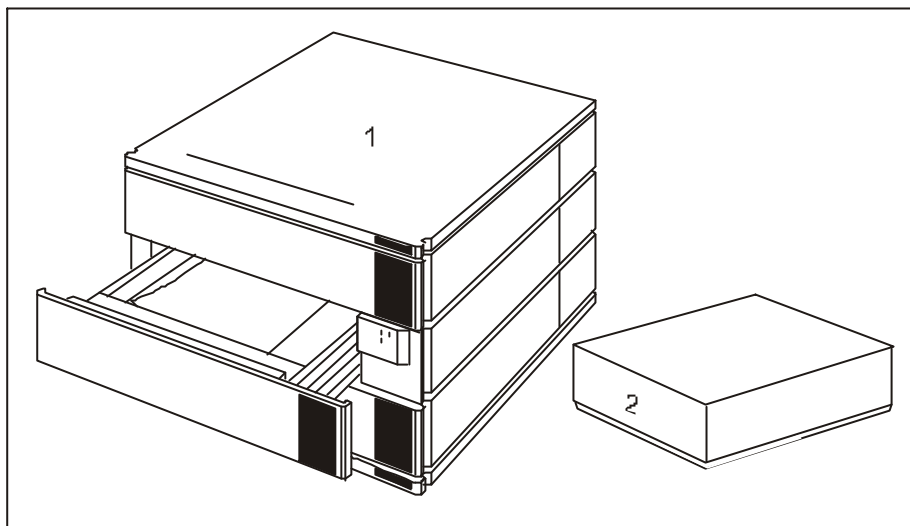


Fig. 6 Box Contents

Accessories Box Contents

- (1) TowerFeed User's Manual
- (2) TowerFeed Installations Software (CD)
- (3) Data Cable
- (4) Power Cable
- (5) Adapter
- (6) Rollers (Floor models only)
- (7) Fastening clamp with screws, dowels and assembly instructions

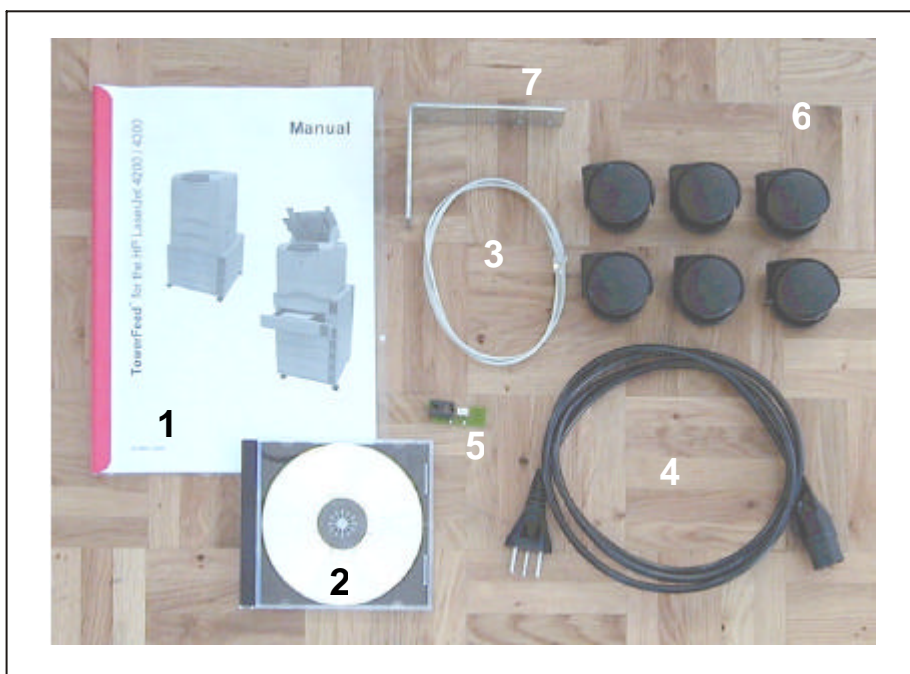


Fig. 7 Accessories Box Contents

Warning:

TowerFeed may weigh up to 38 kilograms (84 pounds) depending on configuration. To prevent back strain or injury, enlist the help of someone and bend your knees when lifting the unit.

Warning:

POWER OFF your printer and TowerFeed and disconnect all power and interface cables before you proceed with the installation.

Hardware Installation

Remove Transportation Inserts

- Pull out, lift upwards and remove the trays from TowerFeed so as to remove the transportation inserts (Fig. 8). There are two at each side (keep the inserts for reshipment).
- Re-insert and close the trays.

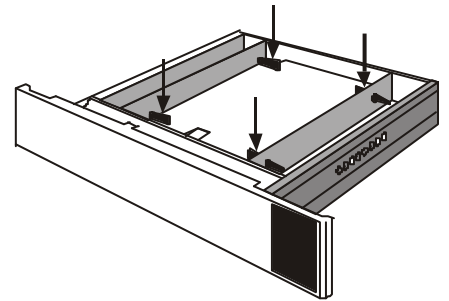


Fig. 8 Removing Transportation Inserts

Note:

Located on the right side of each tray you will find coding pins for the paper size. They are set by the factory and must not be changed.

INSTALLATION

Position and Connect Printer

Warning:

The printer may weigh up to 34 kilograms (75 pounds). Enlist the help of a second person to lift the unit. To prevent back strain or injury, bend your knees when lifting the unit.

- Place the TowerFeed unit at the location you wish.
If your TowerFeed is a desktop model, be sure the table or cabinet is level and sturdy enough to carry the load.
If your TowerFeed is a floor model, be sure to place it on a flat location. *Floor model Towerfeeds especially must be level.*
It might be necessary to use shims to level TowerFeed.
(Note: TowerFeed has 6 wheels)

Note:

If TowerFeed is not level, paper jams and/or left margin deviation may occur. This is indicated if the left corner of the paper is 'dog eared' or the left edge of the paper is shredded, or the left margin is shifted and the print-out skewed.

Note:

To meet **CE** - requirements for absolute toppling security Tower Feed has to be fixed to the building structure at its final location with the fastening bows provided, prior to positioning the printer

- Carefully lift the laser printer onto TowerFeed. Place its positioning holes on the positioning pegs of the TowerFeed top (Fig. 9).



Fig. 9 Positioning the HP LaserJet Printer

Electrical Connection

Without Stacker

- Connect printer and TowerFeed with the data cable (Fig. 10): one end with the printer and the other end with TowerFeed. Use the provided Adapter as a intermediate piece (Fig. 10 a)
- Connect the power cables to printer and TowerFeed .

Note:

Power ON TowerFeed before or simultaneously with the printer.

Caution:

Only move TowerFeed to another place with **drawers closed** and **without printer on top** to avoid hazard of toppling. Drawers need to be secured against unintentional opening. Be careful when crossing doorsteps or different flooring materials.



Power switches

Fig. 10
Cabel position on unit without
stacker and position of the power
switches

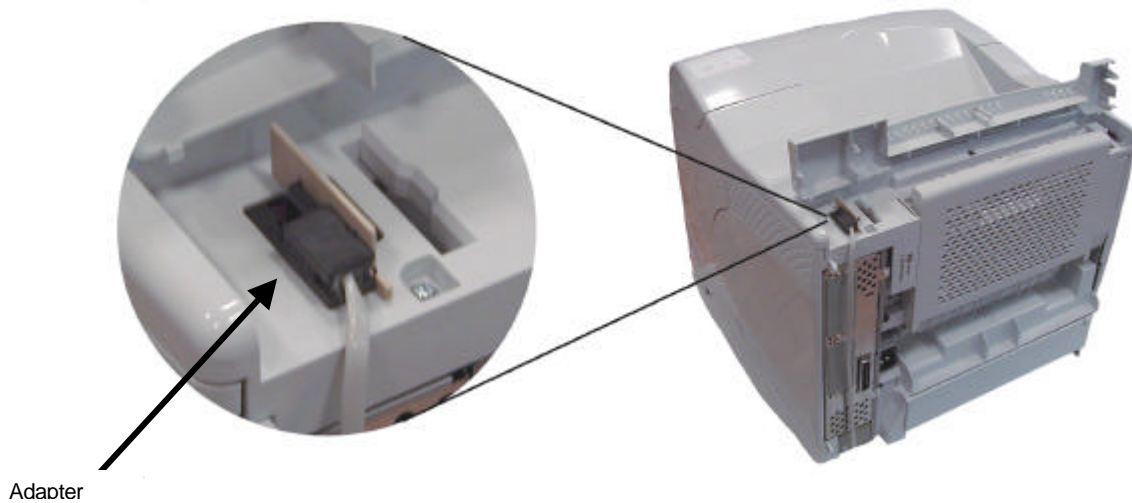


Abb.10 a
Detail view of data cabel positioning

With stacker

- Connect stacker and TowerFeed with the provided data cable (Fig. 10 b): one end with the stacker and the other end with the TowerFeed port. The data communication between TowerFeed and printer takes place via stacker.

Note: The adapter will not be needed in this configuration.

- Connect the power cables to printer and TowerFeed.

Note:

Power ON the TowerFeed befor or simultaneously with the printer.

Caution:

When rolling TowerFeed to another place, take care when crossing doorsteps to not tipping the unit.
To prevent tillting of the unit, do transport the TowerFeed only with **closed trays, without printer and without stacker** on its wheel.
Secure trays against opening for transport.

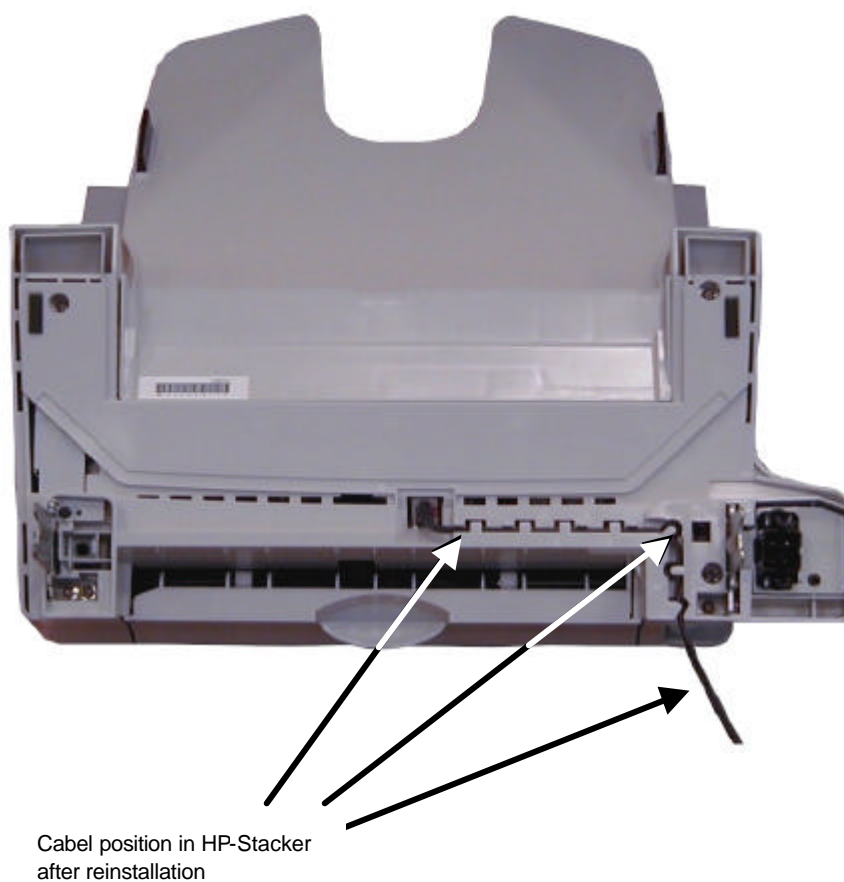


Fig. 10 b
Cabel position on unit with stacker
and position of the power switches

INSTALLATION

Remove HP-Stacker cable and replace it with the provided data cable
See Fig. 10 c)

Fig. 10 c
Cabel position in HP-Stacker



Printer Panel Settings

Papertype Assignments

By default, each paper tray has assigned the paper type PLAIN. In case of a paper out in a selected tray, the printer automatically will pull paper from another tray.

The assigning of a different paper type to each tray inhibits the automatic switching of the printer to another tray if the selected tray runs out of paper.

To assign a paper type to an input tray, select with the menu key the PAPER HANDLING MENU and there the specific input tray. Then assign to each tray another one of the 12 predefined paper types.

If you have several trays with the same paper, assign to each of these trays the same paper type. This will increase your input capacity for this paper type, as the printer will automatically switch to the next tray with the same paper type in case the selected tray runs out of paper.

Note:

PLAIN is the default paper type. In case a print job arrives without paper selection, the printer will pull paper from the first tray containing PLAIN paper (e.g. printer test pages).

Software Installation

Installation of Printer Driver

The CD delivered with your TowerFeed system contains the HP LaserJet 4200 / 4300 PCL 5 and PCL 6 software supporting the TowerFeed option for Windows XP and 2000.
(Postscript driver in preparation)

Note:

After installing the new printer driver, exit and restart your Windows System.

For availability of the most recent printer drivers and drivers for other operating systems, please consult our WEB page at: www.rutishauser.ch

INSTALLATION

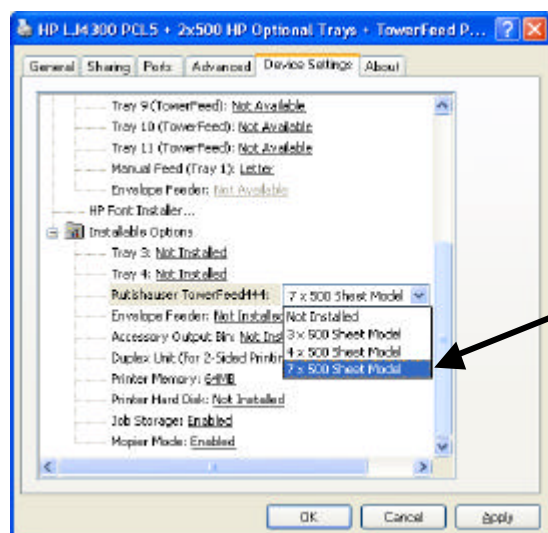
Configuring the TowerFeed Option

Go to the Control Panel and select *Printers*. There click on the respective HP LaserJet Printer.



HP LJ4300 PCL6
+ 2x500 HP
Optional Trays +
TowerFeed

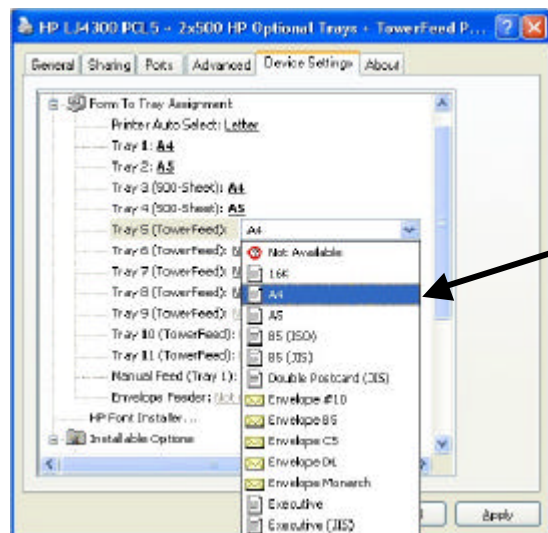
Use the right mouse button to open the *Settings*. Then click on the hardware settings icon. There choose the appropriate TowerFeed you are using in the pull-down Window, do the same as well with all the other printer equipment your are using (extension tray, duplex, etc.)



Choose the correct TowerFeed model.

Note: You must have the correct driver installed to do so.

After having done so the TowerFeed trays need to be set on the correct paper size format.



Choose the appropriate paper size format (The paper format you are going to use in your TowerFeed).

Having done so your TowerFeed is ready for operation.

Note:

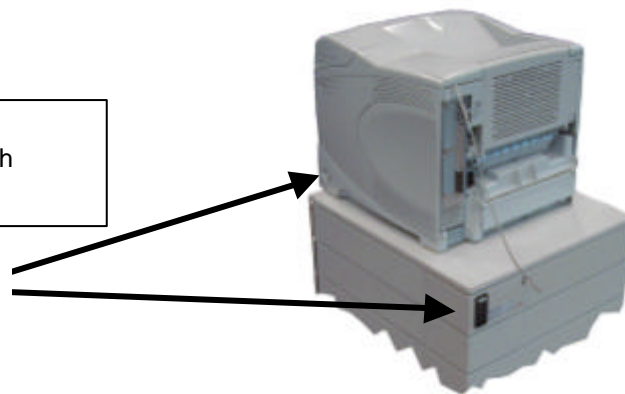
For further information on Tray and MediaType definition please refer to Appendix B – Tips and Hints of this manual.

How to turn the system on

Note:

Power ON TowerFeed before or simultaneously with the printer.

Position of the power switches



Loading Paper

- Pull open the tray you wish to load until it reaches the stop or remove it completely for more convenient loading.
- Obtain a fresh ream of paper. Best results will be obtained using regular copier or laser printer paper (see "Paper Quality Guidelines"). Hold the ream on the long edge and bend it in and out. Repeat on the short edge. Square it off properly (Fig. 11).
- Load letterhead paper face down, with the letterhead towards the front panel.

Note:

Duplex printing requires different loading of preprinted paper (please also refer to the instructions in the printer manual). *An additional TowerFeed tray will allow to have the same (preprinted) paper in two different trays and available online for regular and duplex printing.*

- Insert approx. one third of the ream in the tray and ensure that all paper is lined up with the rear stop. Repeat two more times for the rest of the ream (Fig. 12).
- Push down the stack, such that all sheets are under the separation corners (Fig. 13).
- The right paper guide can be adjusted by pushing the separation corner tab to the left to ensure proper guiding of the paper.
- Push down on the paper stack a few times. The paper must move up and down freely.

Note:

For your convenience, you may insert a sample piece (about 1 inch/28 mm) of the loaded paper type into the extrusion as a reference when reloading the tray (Fig. 14).

- Close the tray. Repeat the procedure for all trays to be loaded.

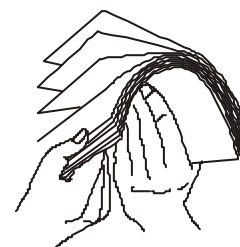


Fig. 11 Fanning the Paper

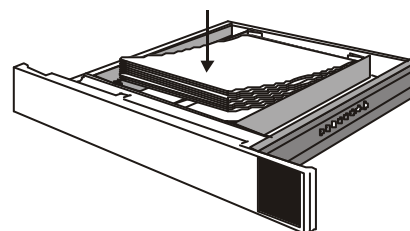


Fig. 12 Filling in Paper

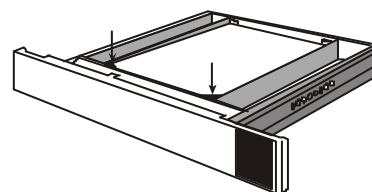


Fig. 13 Correct Paper Loading

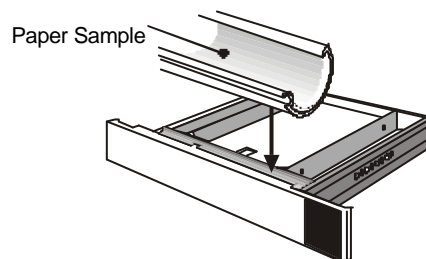


Fig. 14 Marking the Tray

OPERATING

Reloading Paper

While feeding occurs from a higher tray, lower ones may be reloaded without interrupting feeding and printing. To reload paper please refer to 'Loading Paper'.

The printer panel message
(n = drawer number)

TRAY n LOAD
Media Type & Size

indicates that the printer does not see the requested paper. In this case please refer to the following section 'Out of Paper'.

Out of Paper

If a TowerFeed tray runs out of paper, the printer will automatically switch to another tray with the same paper size and type (depending on the printer settings). If that paper is not available from another tray, the red Attention LED on the printer panel will start blinking and the printer message appears

TRAY n LOAD
Media Type & Size

- Refill the tray with the correct paper and close the tray.

Paper Jam

Note:

It is best to first try to clear jams and continue printing without turning the units off.

In case of a paper jam, the printer panel Attention LED will start blinking and the printer display will show a respective message with the following meaning:

13.01 PAPER JAM	paper jam in printer
13.11 PAPER JAM	paper jam in TowerFeed
13.20 PAPER JAM	paper jam in TowerFeed and printer

- In case of a **printer paper jam**, you will see the following messages:



13.01 PAPER JAM
IN TRAY n

Remove the paper jam and all other pages in the paper path and close all the cover(s). Printing will continue. For more details on clearing printer paper jams please refer to your printer manual (Chapter Maintenance and Trouble Shooting, Section Paper Jams).

- In case of a **TowerFeed paper error**, the following messages will be displayed:

13.11 PAPER JAM
IN INPUT ACCESSORY

and TowerFeed will beep with either one of the following sequences (depending on type of error):


 or
 

(TowerFeed Paper Jam) (TowerFeed Motor Block)



Open the TowerFeed trays, starting with the lowest one. TowerFeed beeping will stop when the tray which fed the last sheet is opened. Remove the jammed paper from the TowerFeed paper path. Close all TowerFeed trays. Printing will continue automatically.

- In case of a **paper jam in printer and TowerFeed**, the following messages will appear

13.20 JAM
TOP COVER AREA

13.11 PAPER JAM IN
INPUT ACCESSORY

and TowerFeed will beep with either one of the following sequences (depending on type of error):


 or
 

(TowerFeed Paper Jam) (TowerFeed Motor Block)

Important Note:

In case of a paper jam in printer and TowerFeed, do NOT open the TowerFeed trays for the moment (TowerFeed beeping will continue). First remove the paper jam in the printer. Therefore, open the printer cover(s) and remove all pages from the printer's paper path. Close the printer cover(s). Wait until the following message will be displayed: '13.11 PAPER JAM IN INPUT ACCESSORY'. Now, open the TowerFeed trays, starting with the lowest one. TowerFeed beeping will stop when the tray, which fed the last sheet, is opened. Remove the jammed paper from the TowerFeed paper path. Close all TowerFeed trays. Printing will continue automatically.

If you do not follow this order, the jam situation can't be removed anymore: the printer must be turned off and on again. The current print job will get lost.

PAPER QUALITY GUIDELINES

General

These paper quality guidelines are general recommendations. Paper beyond these specifications may work as well, however it should be tested before use. Paper is a material that reacts intensively to adverse temperature and humidity conditions. The observance of proper conditions as defined below is therefore essential for trouble-free operation of TowerFeed. Please also refer to the corresponding guidelines in the printer manual.

Paper Quality and Surface

Bond type papers and papers with slight rag content are recommended. For papers with high rag content, as well as very light and air mail papers, feeding tests must be conducted to check for satisfactory performance before regular use. Paper with embossed or heavy printing should be tested in TowerFeed before use, as well. Papers with glossy or structured surface are not recommended. Individual sheets in a stack must not be damaged, warped more than 3 mm (0.12") at an angle of max. 20° or creased, since all these may reduce the feeding performance.

Paper Weight

60 - 95 g / m² (16 - 24 lb.). Other paper weights must be tested before use.

Tolerance

Paper must be cut to the appropriate size dimension within a tolerance of +/- 1.0 mm (+/- 0.04"). The paper stack must be cut square to within a tolerance of 90° +/- 0.1°.

Recommended Storage Environment

Temperature: 18°C - 24°C (64°F - 75°F)

Relative humidity: 40% - 60%

HP LaserJet Duplexer Option

The printer's duplexing capabilities remain fully supported with the TowerFeed paper handling option installed.

Additional 500-Sheet Tray

Up to two 500-Sheet Tray can be operated in conjunction with the TowerFeed

POWERSAVE Function (Printer Setting)

HP LaserJet 4200/4300: The POWERSAVE function is fully supported with TowerFeed installed.

APPENDIX B - Tips & Hints

Power ON Sequence

Power On TowerFeed before or simultaneously with the printer.

When powering on the printer, it will scan its option bus for available options. In case TowerFeed is not ready at that point of time, the printer will not activate its support and not add this option to its configuration.

Printing on the wrong Paper

Why doesn't it print from the tray I selected?

If a selected Tray # ran out of paper or does not contain the paper size assigned for the print job, the printer might look for other trays containing the demanded paper size, and if this is available (and with the same Media Type as Tray #) will pull paper from there.



The 3 Rules For Correct Paper Selection

- 1. Assign a different Paper Type to every Tray # by using the printers control panel.**
You can assign the same Paper Type to two or more tray numbers only if these trays all contain the same Paper Type.
- 2. Make sure that you select the correct Paper Size for the selected Paper Type.**
The selected Paper Size in the application software must be the same as what the size of that paper in the printer actually is.
- 3. Select paper within your application by Paper Type or by Tray #.**
If a tray containing the selected Paper Type runs out, the printer will pull paper from other trays only if they have the same Paper Size and Type.

Paper Control and Selection

Selection Criteria

The HP LaserJet 4200 / 4300 offers various possibilities to select paper by offering three selection criteria:

- Paper Size
- Paper Source (Tray number)
- Paper Type (Media type)

The selection criteria differ in their priorities and can be changed using the JetAdmin utility software.

Paper Types

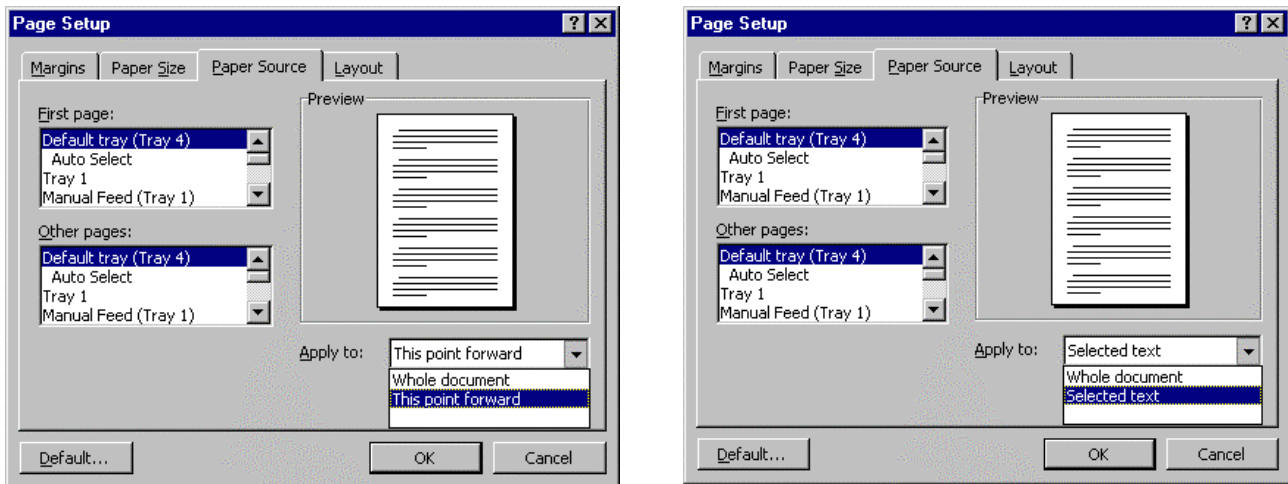
The Paper (Media) Type is a selection criteria which can be used to name trays and to distinguish between different paper types within a given paper size. The HP LaserJet 4200 / 4300 offers 12 predefined Media Types. The Media Types are: Plain, Preprinted, Letterhead, Transparency, Prepunched, Labels, Bond, Recycled, Color, Card Stock, and Rough.

Default Paper Type

Without a specific paper type assigned to a Tray, Plain becomes the default paper type. To assign a paper type to a Tray number using the printer control panel, please refer to Papertype Assignment on page 11 of this manual.

Creating Paper Sequences for a Word Document

It is widely known that in Page Setup you have the possibility to enter different paper sources for First Page and Other Pages. If there are other pages in the document, which have to be printed on another paper, this can be defined in the same Page Setup window. In this window there is a pull-down bar *Apply to:* which is used for that purpose. The default setting is *Whole document* but there are also the options *This point forward* and *Selected text*, which can be selected.



The option *Apply to:* allows to force a change of the paper source for a specific page or from a specific page onwards and thus to define paper sequences for a whole document.

Printing a Document with copies on the HP LaserJet 4200 / 4300 with TowerFeed

When printing a document you get either an original copy (copies = 1), or, if you set copies = n, you will get n times the same printout. Usually you want the original document to distinguish from its copies. An elegant method for that purpose is to print the copies on different (color) paper. This can be done by sending the print job several times to the printer but with different page settings. Using a Macro makes this an easy task.

On the next page you find an example of a macro used with a Word document. The macro starts with 'Sub Makro' and ends with 'End Sub'. It consists of several modules (one per copy) which contain the paper definitions for each copy (FirstPageTray = xx; OtherPagesTray = yy).

You can use the Macro Recording function of Word (Extra-Macro-Record) to produce the first module by performing the steps for Page Setup and Print. Then, in Macro Edit mode, you copy/paste this module to have one for each copy to print (one module per copy). Finally you edit the entries in FirstPageTray = xx; OtherPagesTray = yy to the desired paper sources.

This will produce a macro which prints the document in multiple copies and with the respective page settings. Such a macro can be incorporated into a Menu item or added as icon into the Toolbar.

Hint: When creating and adding a Macro to the Toolbar for automatic printing of the final document with its copies, it might be useful to also create and add a second Macro for easy printing of document drafts on cheap paper.

APPENDIX B - Tips & Hints

The following table shows the internal denominations of the paper sources:

HP LaserJet 4200 / 4300		Media Type
Tray	Denomination	
TF 1	256	e.g. Letterhead
TF 2	257	e.g. Plain
TF 3	258	e.g. Bond
TF 4	259	e.g. Color
TF 5	260	
TF 6	261	
TF 7	262	

TF = TowerFeed Tray

Example:

The following Word Macro will produce an original document (on company paper) incl. 2 copies (plain and color).

Page	Original (Copy 1)	1 st Copy (Copy 2)	2 nd Copy (Copy 3)
First Page	Letterhead	Plain	Color
Other Pages	Bond	Plain	Color

Macro Start

Sub Macro1 ()

Macro1 Macro

Macro recorded 30.01.03 by ...

```
With ActiveDocument.PageSetup
    .LineNumbering.Active = False
    .Orientation = wdOrientPortrait
    .TopMargin = CentimeterToPoints (2.5)
    .BottomMargin = CentimeterToPoints (2)
    .LeftMargin = CentimeterToPoints (3)
    .RightMargin = CentimeterToPoints (1.5)
    .Gutter = CentimeterToPoints (0)
    .HeaderDistance = CentimeterToPoints (1.25)
    .FooterDistance = CentimeterToPoints (1.25)
    .PageWidth = CentimeterToPoints (21)
    .PageHeight = CentimeterToPoints (29.7)
    .FirstPageTray = 257
    .OtherPagesTray = 258
    .SectionStart = wdSectionNewPage
    .OddAndEvenPagesHeaderFooter = False
    .DifferentFirstPageHeaderFooter = False
    .VerticalAlignment = wdAlignVerticalTop
    .SuppressEndnotes = False
    .MirrorMargins = False
```

End With

ActiveDocument.PrintOut

```
With ActiveDocument.PageSetup
.LineNumbering.Active = False
.Orientation = wdOrientPortrait
.TopMargin = CentimeterToPoints (2.5)
.BottomMargin = CentimeterToPoints (2)
.LeftMargin = CentimeterToPoints (3)
.RightMargin = CentimeterToPoints (1.5)
.Gutter = CentimeterToPoints (0)
.HeaderDistance = CentimeterToPoints (1.25)
.FooterDistance = CentimeterToPoints (1.25)
.PageWidth = CentimeterToPoints (21)
.PageHeight = CentimeterToPoints (29.7)
.FirstPageTray = 261
.OtherPagesTray = 262
.SectionStart = wdSectionNewPage
.OddAndEvenPagesHeaderFooter = False
.DifferentFirstPageHeaderFooter = False
.VerticalAlignment = wdAlignVerticalTop
.SuppressEndnotes = False
.MirrorMargins = False
```

End With

ActiveDocument.PrintOut

```
With ActiveDocument.PageSetup
.LineNumbering.Active = False
.Orientation = wdOrientPortrait
.TopMargin = CentimeterToPoints (2.5)
.BottomMargin = CentimeterToPoints (2)
.LeftMargin = CentimeterToPoints (3)
.RightMargin = CentimeterToPoints (1.5)
.Gutter = CentimeterToPoints (0)
.HeaderDistance = CentimeterToPoints (1.25)
.FooterDistance = CentimeterToPoints (1.25)
.PageWidth = CentimeterToPoints (21)
.PageHeight = CentimeterToPoints (29.7)
.FirstPageTray = 257
.OtherPagesTray = 257
.SectionStart = wdSectionNewPage
.OddAndEvenPagesHeaderFooter = False
.DifferentFirstPageHeaderFooter = False
.VerticalAlignment = wdAlignVerticalTop
.SuppressEndnotes = False
.MirrorMargins = False
```

End With

ActiveDocument.PrintOut

End Sub

Macro End

APPENDIX C - Standard Applications

Where to select Paper Size and Paper Type

You select the TowerFeed option paper sources from your standard application software the same way as the regular printers paper sources.

Please also refer to Appendix B (Tips & Hints - The 3 Rules For Correct Paper Selection) for recommendations on which paper selection criteria to use.

Below you will find the information on where to set the paper selection parameters in the most common standard applications.

MS-WORD:	File - Page Setup -	Paper Size: Paper Source:
EXCEL:	File - Print - Printer - Setup -	Paper Size: Paper Source:
	File - Page Setup - Page - Options:	Paper Size: Paper Source:
WRITE:	File - Print - Setup	Paper Size: Paper Source:

APPENDIX E - PCL Paper Selection Commands

Frequently used PCL commands for Paper Selection:

Command	Function	# Refers to	LJ 4200 / 4300 LJ 4200 / 4300 N	LJ 4200 / 4300 T LJ 4200 / 4300 TN																																							
ESC & I # H	Selects Paper Source	0 2 3 7 4 1 8 5 6 20 (TF Tray 1) 21 (TF Tray 2) 22 (TF Tray 3) 23 (TF Tray 4) 24 (TF Tray 5) 25 (TF Tray 6) 26 (TF Tray 7)	print/eject page Man. Feed - Paper Man. Feed - Env. Auto Select Tray 1 Tray 2 (500-sheet Tray) NA Envelope Feeder Tray 3 Tray 4 Tray 5 Tray 6 Tray 7 Tray 8 Tray 9	print/eject page Man. Feed - Paper Man. Feed - Env. Auto Select Tray 1 Tray 2 (500-sheet Tray) Tray 3 Envelope Feeder Tray 4 Tray 5 Tray 6 Tray 7 Tray 8 Tray 9 Tray 10																																							
ESC & I # A	Sets Paper Size	2 = Letter 3 = Legal 26 = A4 for other sizes please refer to your printer manual																																									
ESC & n # Wd mediatype	Selects Media Type	<table><tr><th>#</th><th>mediatype</th><th>Panel Display**</th></tr><tr><td>n/a</td><td>Any</td><td>ANY</td></tr><tr><td>6</td><td>Plain</td><td>PLAIN</td></tr><tr><td>11</td><td>Preprinted</td><td>PREPRINTED</td></tr><tr><td>11</td><td>Letterhead</td><td>LETTERHEAD</td></tr><tr><td>13</td><td>Transparency</td><td>TRNSPRNCY</td></tr><tr><td>11</td><td>Prepunched</td><td>PREPUNCHED</td></tr><tr><td>7</td><td>Labels</td><td>LABELS</td></tr><tr><td>5</td><td>Bond</td><td>BOND</td></tr><tr><td>9</td><td>Recycled</td><td>RECYCLED</td></tr><tr><td>6</td><td>Color</td><td>COLOR</td></tr><tr><td>11</td><td>Card Stock</td><td>CARDSTOCK</td></tr><tr><td>6</td><td>Rough</td><td>ROUGH</td></tr></table> <p>**indication for reference purposes only</p>			#	mediatype	Panel Display**	n/a	Any	ANY	6	Plain	PLAIN	11	Preprinted	PREPRINTED	11	Letterhead	LETTERHEAD	13	Transparency	TRNSPRNCY	11	Prepunched	PREPUNCHED	7	Labels	LABELS	5	Bond	BOND	9	Recycled	RECYCLED	6	Color	COLOR	11	Card Stock	CARDSTOCK	6	Rough	ROUGH
#	mediatype	Panel Display**																																									
n/a	Any	ANY																																									
6	Plain	PLAIN																																									
11	Preprinted	PREPRINTED																																									
11	Letterhead	LETTERHEAD																																									
13	Transparency	TRNSPRNCY																																									
11	Prepunched	PREPUNCHED																																									
7	Labels	LABELS																																									
5	Bond	BOND																																									
9	Recycled	RECYCLED																																									
6	Color	COLOR																																									
11	Card Stock	CARDSTOCK																																									
6	Rough	ROUGH																																									






APPENDIX F - Troubleshooting

Diagnosing an Error Situation

When calling for support, please have the Printer test pages at hand (Configuration Page, Menu Map and Event Log Page as per APPENDIX G).

Pos	LED	Printer Display	TF Beeping	Description	Action / Remarks
1	ON	TRAY n OPEN READY		Tray n open	Close Tray
2	ON	TRAY n EMPTY READY		Empty Tray without pending print request	Reload Tray n
3	ON	TRAY 1 LOAD Media Type & Size		Requested paper not available	Load Tray 1 with the correct size See printer manual to change Media Size and Type through the printer control panel.
4	ON	TRAY n LOAD Media Type & Size		Paper requested from empty Tray n	Refill Tray n Switches automatically to next Tray with same Size & Type and pulls paper from there (depending on settings).
5	ON	13.01 PAPER JAM IN TRAY n		Paper jam in Printer	Clear paper jam and all other sheets from the paper path. Open/close printer cover(s) Also refer to section 'OPERATING - 'Paper Jam' in this manual and to your printer manual for further details.
6	ON	13.20 JAM IN TOP COVER AREA 13.11 PAPER JAM IN INPUT ACCESSORY	Beep Type 2 or Beep Type 3	Paper jam in Printer and TowerFeed Paper jam in TowerFeed, and TowerFeed Motor blocked	Clear paper jam in printer and TF. Close TF Tray(s) and printer cover(s). Remove all sheets from TF and printer paper path. Close TF Tray(s) and printer cover(s). In case error stays, call Service.
7	ON	13.11 PAPER JAM IN INPUT ACCESSORY 13.11 PAPER JAM IN INPUT ACCESSORY	Beep Type 2 or Beep Type 3	Paper jam in TowerFeed TowerFeed Motor blocked	Clear paper jam in TF. Close TF Tray(s). Open TF Tray(s). Remove all sheets from the TF paper path. Close TF Tray(s). In case error stays, call Service.
8		INITIALIZING		Printer display does not switch to READY	Turn the printer off and on again and switch off the POWERSAVE function.

TowerFeed Beep Types

Type 0 (1x short)		TowerFeed Reset Beep (e.g. after Power ON)
Type 1 (short - short)		Paper in TowerFeed paper path after a printer Reset
Type 2 (long - long)		Paper Jam in TowerFeed
Type 3 (short - long)		TowerFeed Motor blocked
Type 4 (6x short)		Opening a TowerFeed tray during a feed cycle

Other Error Conditions

Pos	Description	Action / Remarks
9	TowerFeed Trays not showing up in <i>Paper Sources</i> of the Printer Dialog	Check for correct printer driver (cf. page 9 of this manual)

APPENDIX G - Printer Selftest Pages

The following three functions allow you to print out information about your printing system configuration. These pages can be selected via printer panel (Item: INFORMATION MENU).

Note:

The information for the configuration page are recorded at power-up time. There is no update of the changes after power-up.

Configuration Page (sample page on page 27)

This page will be printed via printer panel (INFORMATION MENU - PRINT CONFIGURATION).
Of particular interest are the indications under Paper Trays and Options where you can see:

Paper Trays and Options

- PH Controller (Revision) PHC
- Device 1:

Rutishauser TOWERFEED 444 option with configuration,
Firmware Revision of Option PCB/Logic PCB,
installed trays [size code*] and tray capacity
*[size codes]: A4=1 , US Letter=2 , US Legal=3

Even Log

- Shows the last 4 errors incl. TowerFeed errors.

TF Error Codes 13.11.xx	1**	2**	3**	4**	5**	6**	7**
TowerFeed Motor blocked	15	16	17	18	19	1A	1B
TowerFeed Paper Jam	1F	20	21	22	23	24	25
Tray opened while feeding	29	2A	2B	2C	2D	2E	2F
Printer Jam	33	34	35	36	37	38	39

** Number of TowerFeed tray (not printer tray) which feed the last sheet

Paper path test page (sample page on page 29)

The Menu Map page can be selected via printer panel (INFORMATION MENU - PRINT MENU MAP).
This page is showing the different paper sources and its allocated Media Types.

PAPER HANDLING MENU

showing paper sources (trays) with the allocated Media Types, e.g.
Tray 4 TYPE = LETTERHEAD

Event Log Page (sample page on page 28)

Via printer panel (INFORMATION MENU - PRINT EVENT LOG) you can print the Event Log Page showing the last 50 system errors including an error code for identification. Very helpful for diagnosing purposes!

TowerFeed error codes:	HP LJ 4200	HP LJ 4300	
	13.11.xx	13.11.xx	TowerFeed Paper Jam
	13.11.xx	13.11.xx	TowerFeed Motor blocked

xx = see in above event log chart

Note:

Whenever calling for service, please make sure to have these information pages at hand.

hp LaserJet 4200 printers



configuration page

1

Printer Information

Product Name: hp LaserJet 4200
 Printer Name: hp LaserJet 4200
 Printer Number: 6
 Printer Serial Number: XXXXXXXXXX
 Formatter Number: S46XXXXXXX
 Firmware Datecode: 20030213 04.007.3
 Service ID: 00000
 PS Wait Time-out: 300 seconds
 Page Count: 2
 Preventive Maintenance Interval: 200000
 Pages Since Last Maintenance: 2

Memory

Total Memory: 48 MB
 DWS: 6.00
 Automatic Resource Saving Enabled

Event Log

Number of Entries in Use: 10
 Maximum Number of Entries: 50
 Three Most Recent Entries:

Number	Page Count	Entry
10	2	41.03.00
9	1	13.11.16
8	1	41.03.00

Security

Control Panel Lock: NONE
 Control Panel Password: DISABLED

Installed Personalities and Options

PS (20010402)
 PCLXL (20010402)
 PCL (20010402)
 DIMM Slot 1: Side 1: 8 MB Flash
 Side 2: 48 MB SDRAM
 DIMM Slot 2: Empty
 DIMM Slot 3: Empty
 DIMM Slot 4: Empty
 EIO 1: Empty
 EIO 2: Empty

Paper Trays and Options

Default Paper Size: LETTER
 Tray 1 Size: ANY SIZE
 Tray 1 Type: ANY NORMAL
 Tray 2 Size: A4 STANDARD
 Tray 3 Size: A4 STANDARD
 Tray 4 Size: A4 STANDARD
 Duplex Unit
 Device 1:
 HEWLETT-PACKARD
 HP 500-SHEET STAPLER/STACKER MP02.13 Q2443A
 Output Bins:
 1: OPTIONAL BIN 1: 500 Sheets, Face Down
 Device 2:
 RUTISHAUSER TOWERFEED
 444.xx.66.xx 2.00/1.00 [2222222]
 Input Trays:
 1: TRAY 5: 500 Sheets
 2: TRAY 6: 500 Sheets
 3: TRAY 7: 500 Sheets
 4: TRAY 8: 500 Sheets
 5: TRAY 9: 500 Sheets
 6: TRAY 10: 500 Sheets
 7: TRAY 11: 500 Sheets

Please refer to page 26 for more information on this page.

hp LaserJet 4200 printers



event log page 1

Current Page Count: 1 Serial Number: XXXXXXXXXX

Number	Page Count	Event	Description or Personality
4	1	13.11.16	EXTERNAL INPUT DEVICE PAPER JAM
3	3	13.20.00	PRINTER COULD NOT AUTOMATICALLY EJECT PAPER
2	2	13.11.33	EXTERNAL INPUT DEVICE PAPER JAM
1	2	13.01.00	PAPER FEED 1, PAPER LATE JAM

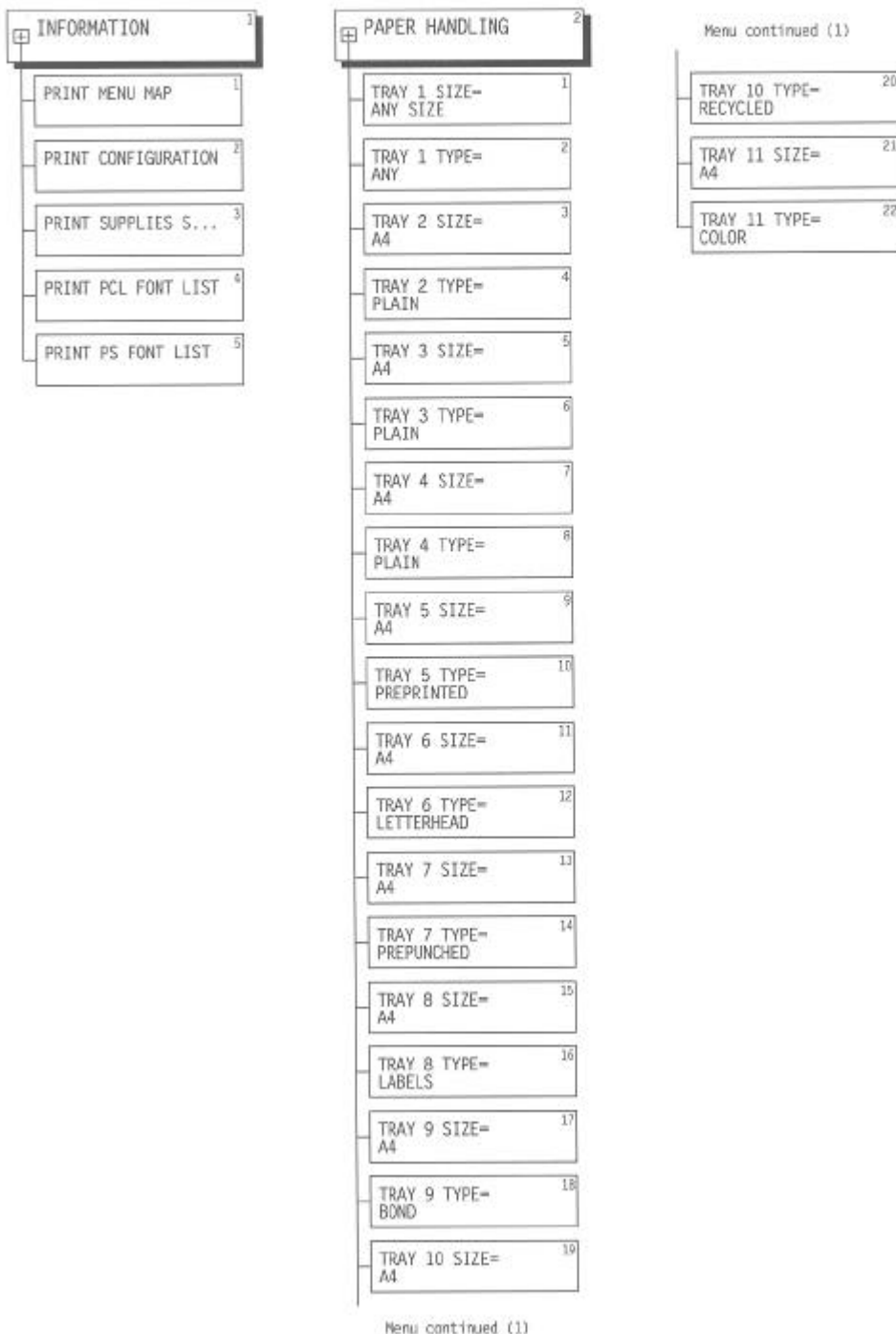
Please refer to page 26 for more information on this page.

hp LaserJet 4200 printers



menu map (common functions)

1



Please refer to page 26 for more information on this page.

APPENDIX H - TowerFeed Selftest

TowerFeed Selftest Feature

The TowerFeed selftest feature allows to test the TowerFeed unit independently from any printer and computer. With this test you can check for correct paper feeding (horizontal position, skew, jam behavior).

Note:

To perform a TowerFeed selftest, remove the printer's paper cassette.

Follow the following steps:

- Power-off TowerFeed.
- Open all TowerFeed Trays (approx. 5 cm is sufficient).
- Power-on TowerFeed.
- Wait until you hear a short beep followed by the clicking of the solenoid activation in every module, and finally the spinning of the motor (approx. 5 sec).
- Close the top-most TowerFeed tray. After a few seconds a sheet will be fed from this drawer. You now can mark the position of the left border of the sheet on the TowerFeed top cover (reference for horizontal paper position).
- Pull out the sheet from its waiting position. TowerFeed will automatically feed a next sheet. You now can compare the position of the left border of the next sheet. If it moves up straight in the same position, this is ok. (In case the left position would be different, or moving from left to right (or vice-versa), this might indicate a problem in either the tray, the unit (module) or the paper loading.)
- To test the next lower tray, close that tray before removing the sheet from its waiting position. Now TowerFeed will feed the sheet from that next lower tray. (TowerFeed will always feed the next sheet from its lowest closed tray.)
- To revert to normal operation, power-off and on TowerFeed again with at least on tray closed. TowerFeed will respond with a short 'Reset' beep that it is ready again.

In case error conditions are showing up which are depending on a specific TowerFeed tray, you can swap trays to find out whether a problem exists with the tray itself or whether a specific module is the cause.

APPENDIX I - Cleaning and Maintenance

TowerFeed does not require preventive maintenance. Cleaning of housing and removal of paper dust from within the TowerFeed drawers might now and then be indicated.

In case you are using a paper type which emits large amounts of paper dust, it might be indicated to clean the transport rollers and oil the bearings of the transport roller shafts occasionally. For that purpose use only the Rutishauser maintenance-kit No. 270 302.

Clean the outside of TowerFeed with a lightly water-dampened cloth. Do not use detergents to avoid damage of the surfaces.

To **clean the paper drawers** from paper dust, completely remove the drawers from TowerFeed, remove the paper and use a vacuum cleaner with a soft brush.

For further references see our WebPages: www.rutishauser.ch

Warning:

To avoid damage to the paper-out sensor arms do not reach into the openings for the paper drawers.

APPENDIX J – TowerFeed Specifications

Dimensions and Weights:	<i>Model Designation</i>	<i>Width</i>	<i>Depth</i>	<i>Height</i>	<i>Weight</i>
Desktop Model	TF 444/33.66	480 mm	545 mm	310 mm	19.5 kg
Desktop Model	TF 444/44.66	480 mm	545 mm	405 mm	24.0 kg
Floor Model	TF 444/77.66	480 mm	545 mm	720 mm	38.0 kg
Paper Specifications:	60 - 95 g/m ² (16 - 24 lb.)				
	Note:	Also consult the paper specifications for your printer.			
Paper Trays:	<i>Standard trays:</i>				
	Europe:	A4 Portrait (European Size)			
	USA:	US Letter Portrait (8 ¹ / ₂ " x 11")			
	<i>Optional trays:</i>				
	USA:	US Legal Portrait (8 ¹ / ₂ " x 14")			
Tray capacity:	Up to 500 sheets or a stack of 52 mm, whichever is reached first.				
Positioning accuracy:	For bond type paper typically better than				
	vertical:	+/- 2.0 mm (0.08")			
	horizontal:	+/- 2.0 mm (0.08")			
	skew:	2.5 mm (0.10")			
Temperature:	Operating:	10°C to 32°C (50°F to 90°F)			
	Storage:	-25°C to 50°C (-13°F to 122°F)			
Relative humidity (non-condensing):	Operating:	30% to 80%			
	Storage:	5% to 95%			
	Note:	Observe recommended storage conditions for paper (see 'Paper Quality Guidelines').			
Power Requirements:	Voltage	100 - 230 V~ (+/-10%)			
	Frequency	50 – 60 Hz			
	Current	1.5 A max.			
Fuse Type:	3.15A / 250V slow (5x20mm)				

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TowerFeed is available for the following HP LaserJet printers:



TowerFeed 444 for the
HP LaserJet 4100 Series



TowerFeed 444 for the
HP LaserJet 4200 / 4300 Series



TowerFeed 444 for the
HP LaserJet 8150 Series



TowerFeed 444 for the
HP LaserJet 9000 / 9000 MFP

TowerFeed – a Swiss product - manufactured by

Rutishauser Data AG
Kronenstrasse 9
CH-8712 Staefa
Switzerland

Tel +41 (0) 43 477 1111
Fax +41 (0) 43 477 1122
e-mail welcome@rutishauser.ch
Internet www.rutishauser.ch

The logo for Rutishauser, featuring the company name in a bold, white, sans-serif font on a black background, which is itself set against a red horizontal bar.